EAST Browser - L4: (202) surface with... | US 5112354 A | Tag: S | Doc: 24/202 (SORTED) | Format : KWIC

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	Document ID	K	So	Issue Da	Pag	Titl
1	US 4394370 A		U	19830719	4	Bone gra
2	US 4430760 A		U	19840214	3	Nonstres
3	US 4472840 A		U	19840925	4	Method o
4	US 4501754 A		U	19850226	8	Methods
5	US 4627853 A		U	19861209	6	Method o
6	US 4681763 A		U	19870721	4	Composit
7	US 4725234 A		U	19880216	13	Alveolar
8	SU 1377068 A		D	19880229	NA	Coxofemo
9	US 4743259 A		U	19880510	13	Use of d
10	US 4902296 A		U	19900220	13	Use of d
11	US 4932973 A		U	19900612	5	Cartilag
12	US 4968590 A		U	19901106	25	Osteogen
13	US 4978684 A		U	19901218	7	Method a
14	US 4988358 A		U	19910129	5	Method f
15	EP 413492 A2		AE	19910220	7	Osteopro
16	US 5011691 A		U	19910430	61	Osteogen
17	JP 03178665 A		J	19910802	6	ARTIFICI
18	US 5061286 A		U	19911029	6	Osteopro
19	US 5067963 A		U	19911126	8	Method o
20	US 5092883 A		U	19920303	7	Method f
21	US 5096703 A		U	19920317	8	Method a
22	JP 04097747 A		J	19920330	8	ARTIFICI
23	US 5108753 A		U	19920428	30	Osteogen
24	US 5112354 A		U	19920512	7	Bone all
25	US 5128122 A		U	19920707	13	Method a
26	SU 1754083 A		D	19920815		Femur he
27	US 5162114 A		U	19921110	16	Bone col
28	US 5171574 A		U	19921215	22	Bone col
29	US 5236456 A		U	19930817	8	Osteogen
30	US 5250302 A		U	19931005	29	Osteogen
31	US 5258494 A		U	19931102	57	Osteogen
32	US 5266683 A		U	19931130	128	Osteogen
33	US 5273964 A		U	19931228	8	Inorgani
34	US 5306304 A		U	19940426		Flexible
35	US 5314476 A		U	19940524		Demineral
36	US 5324819 A		U	19940628		Osteogen
37	US 5354557 A		U	19941011		Osteogen
38	US 5405390 A		U	19950411		Osteogen
39	US 5455041 A		U	19951003		Method f
40	US 5464439 A		U	19951107		Flexible
41	US 5468845 A		U	19951121		Antibodi
42	US 5468777 A		U	19951121		Method a
43	US 5496552 A		U	19960305		Osteogen
44	US 5507813 A		U	19960416		Shaped m
45	US 5510396 A		U	19960423		Process
46	US 5513662 A		U	19960507		Preparat
47	US 5531791 A		U	19960702		Composit
48	US 5556430 A		U	19960917		Flexible
49	US 5656593 A		U	19970812		Morphoge
50	US 5670336 A		U	19970923		Method f
51	US 5676146 A		U	19971014	5	Surgical

US-PAT-NO: 5112354

DOCUMENT-IDENTIFIER: US 5112354 A
See image for Certificate of Correction

TITLE: Bone allograft material and method

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Abstract Text - ABTX (1):
A textured, demineralized, and unitary mammalian bone section for providing a rigid, foraminous, collagen scaffold for allogenic skeletal reconstruction. The allograft is prepared by treating a section of cadaver bone to remove all soft tissue, then texturing the bone surface to produce a pattern of holes of selected size, density, and depth, and finally demineralizing the bone section to leave a rigid, insoluble collagen scaffold suitable for osteoinduction upon implantation. All such steps are performed with minimal denaturing of the extracellular matrix proteins which remain bound to the collagen scaffold and which are necessary to complete the process of new bone formation.

Brief Summary Text - BSTX (6):
Clinically, decalcified autogenous implants have been successfully used on a small scale for spinal fusions and surface demineralized allogenic cortical bone for intertransverse process fusions. (Urist, Surface Decalcified Allogenic Bone Implants--A Preliminary Report of Ten Cases and Twenty Five Comparable Operations with Undecalcified Lyophilized Bone Implants, Clin. Orthop., Vol. 546, p. 37, 1968; Knapp et al, Use of Cordical Cancellous Allograft for Posterior Spinal Fusion, Clin. Orthop., Vol. 229, p. 98, 1988). It has also been shown that the volume of bone induced by the demineralized grafts is proportional to the external surface area of the implanted matrix. (Glowacki et al, Application of the Biological Principle of Induced Osteogenesis for Craniofacial Defects, Lancet, Vol. 2, p. 959, 1981). This is of importance because it means that it is possible to fill a bony defect of known dimensions with the end result being living integrated bone.

Detailed Description Text - DETX (19):
Thereafter, the demineralized and textured bone grafts are placed in a bath of a defatting solvent to remove all remaining cell debris and cell surface antigens. A defatting solution of chloroform and methanol in a 1:1 concentration has been found effective, but other suitable solvents may be used. A ratio of 1.0 grams of bone per 10 milliliters of defatting solution is recommended with the bath kept at 4.degree. C. with stirring for an interval of approximately 2 hours. The step may be repeated two or more times until complete defatting has taken place, at which time the treated bone section should be rinsed in sterile distilled water.

EAST Browser - L4: (202) surface with... | US 6189537 B1 | Tag: S | Doc: 70/202 (SORTED) | Format : KWIC

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	Document ID	K	So	Issue Da	Pag	Titl
20	US 5092883 A		U	19920303	7	Method f
21	US 5096703 A		U	19920317	8	Method a
22	JP 04097747 A		J	19920330	8	ARTIFICI
23	US 5108753 A		U	19920428	30	Osteogen
24	US 5112354 A		U	19920512	7	Bone all
25	US 5128122 A		U	19920707	13	Method a
26	SU 1754083 A		D	19920815	NA	Femur he
27	US 5162114 A		U	19921110	16	Bone col
28	US 5171574 A		U	19921215	22	Bone col
29	US 5236456 A		U	19930817	8	Osteogen
30	US 5250302 A		U	19931005	29	Osteogen
31	US 5258494 A		U	19931102	57	Osteogen
32	US 5266683 A		U	19931130	128	Osteogen
33	US 5273964 A		U	19931228	8	Inorgani
34	US 5306304 A		U	19940426	4	Flexible
35	US 5314476 A		U	19940524	6	Deminera
36	US 5324819 A		U	19940628	53	Osteogen
37	US 5354557 A		U	19941011	130	Osteogen
38	US 5405390 A		U	19950411	8	Osteogen
39	US 5455041 A		U	19951003	16	Method f
40	US 5464439 A		U	19951107	4	Flexible
41	US 5468845 A		U	19951121	130	Antibodi
42	US 5468777 A		U	19951121	14	Method a
43	US 5496552 A		U	19960305	28	Osteogen
44	US 5507813 A		U	19960416	5	Shaped m
45	US 5510396 A		U	19960423	6	Process
46	US 5513662 A		U	19960507	14	Preparat
47	US 5531791 A		U	19960702	8	Composit
48	US 5556430 A		U	19960917	4	Flexible
49	US 5656593 A		U	19970812	51	Morphoge
50	US 5670336 A		U	19970923	54	Method f
51	US 5676146 A		U	19971014	5	Surgical
52	US 5714589 A		U	19980203	128	Method o
53	US 5733878 A		U	19980331	48	Morphoge
54	US 5750651 A		U	19980512	57	Cartilag
55	US 5788941 A		U	19980804	6	Method o
56	US 5814604 A		U	19980929	55	Methods
57	US 5824084 A		U	19981020	11	Method o
58	US 5840387 A		U	19981124	11	Sulfonat
59	US 5840325 A		U	19981124	28	Osteogen
60	US 5863758 A		U	19990126	128	Nucleic
61	US 5904718 A		U	19990518	12	Delayed
62	US 5904716 A		U	19990518	7	Method f
63	US 5904718 A		D	19990518	12	Producti
64	US 5958441 A		U	19990928	127	Devices
65	US 5980252 A		U	19991109	18	Device a
66	US 6025538 A		U	20000215	16	Compound
67	US 6049026 A		U	20000411	12	Apparatu
68	US 6124314 A		U	20000926	27	Osteopor
69	US 6180606 B1		U	20010130	10	Composit
70	US 6189537 B1		U	20010220	33	Process
71	US 6200347 B1		U	20010313		Composit

US-PAT-NO: 6189537

DOCUMENT-IDENTIFIER: US 6189537 B1

TITLE: Process for producing osteoinductive bone, and osteoinductive bone produced thereby

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Detailed Description Text - DETX (84):

Cortical/cancellous bone strips/cubes are added to the tall inner vessel of the present controlled-flow apparatus in a mesh bag (for example, nylon) or similar device designed to prevent the bone from interfering with the stirring of the liquids being pumped into the demineralization apparatus. The apparatus is closed and hydrochloric acid, 0.5 N, is quickly pumped into the apparatus with stirring begun as soon as a sufficient volume of acid has been pumped into the chamber to permit free movement of the solution through the bone grafts present in the chamber. The pH of the eluent solution is monitored to determine the degree and extent of demineralization of the small bone grafts. Because these bone grafts have a larger volume to surface area than dental bone, the demineralization process takes longer and represents a compromise in average wt % residual calcium present throughout the bone graft being demineralized. The surfaces of these bone grafts are more extensively demineralized than the interiors of these bone grafts and thus the average wt % residual calcium desired must approximate 2.0% to 4.0% in order for the bone to be maximally osteoinductive in a clinical situation, eg. cortical bone allografts demineralized to an average wt % residual calcium of approximately 3.0% will approximate 1.5 to 2.0 wt % on the surface of the bone graft making the surface of the bone graft optimally osteoinductive. Following completion of the desired level of demineralization, the controlled-flow apparatus is immediately drained of acid through drain port 6 and the contents washed extensively with sterile endotoxin-free distilled/deionized water. The pH of the bone is then restored to approximate neutrality by pumping sodium/potassium phosphate buffer (0.01 M, pH 7.0-7.4) into the controlled-flow apparatus until the eluent solution is pH 7.0 to 7.4. The optimally demineralized cortical/cancellous bone may be stored under refrigeration until the osteoinductive potential of small aliquots have been evaluated.